CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 81-33

NPDES NO. CA0028649

WASTE DISCHARGE REQUIREMENTS FOR:

INTEL CORPORATION-FABRICATION SITE "FAB 1A"
SANTA CLARA, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Intel Corporation Fabrication Site "Fab 1A", hereinafter called the discharger, submitted a report of waste discharge (NPDES Short Form C) dated October 23, 1980 applying for waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.

2. The discharger is manufacturing electronic devices using semiconductor manufacturing processes. The discharger proposes to discharge up to 70,000 gallons per day of reverse osmosis reject water to a storm drain tributary to San Tomas Aquino Creek tributary to South San Francisco Bay, both waters of the United States.

3. The Board, in April 1975, adopted a Water Quality Control Plan for the San Francisco Bay Basin. The Plan contains water quality objectives for San Francisco Bay.

4. The beneficial uses of San Tomas Aquino Creek and South San Francisco Bay are:

   a. Recreation
   b. Fish migration and habitat
   c. Habitat for wildlife
   d. Esthetic enjoyment
   e. Industrial water supply
   f. Navigation

5. Effluent Limitation and toxic effluent standards estalished pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.

6. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of Public Resources Code (CEQA) in accordance with Water Code Section 13389.

7. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge, and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.

8. The Board in a public meeting heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that, Intel Corporation Fabrication Site "Fab 1A", in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of an effluent in excess of the following is prohibited:

	Units	Daily Maximum
a. Total Dissolved Solids	mg/l	1,500
b. Flow	gallons per day	70,000

2. The effluent shall not have a pH of less than 6.5 nor greater than 8.5. If the influent water exceeds these limits, the discharger will not cause any further variance.

3. The effluent shall not have a chlorine residual greater than 0.0 mg/l.

4. In any representative set of samples the waste as discharged shall meet the following limit of quality:

TOXICITY:

The survival of Rainbow Trout test fishes in 96 hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

5. The discharge shall be limited to wastewater of the quantity and type described in finding 2 of this Order.

B. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:

a. Floating, suspended, or deposited macroscopic particulate matter or foam;

b. Bottom deposits or aquatic growths;

c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;

d. Visible, floating, suspended or deposited oil or other products of petroleum origin;

e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

C. Provisions

1. The discharger shall comply with all effluent and receiving water limitations and provisions of this Order immediately upon discharge.

2. The dischargers shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.

3. This Order includes the attached "Standard Provisions" dated April 1977 except Provisions and Requirements A.5, A.7, A.12, A.13, A.16, B.3 and B.5.

4. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing provided the Regional Administrator of the U. S. Environmental Protection Agency has no objections.

5. This Order expires on June 16, 1986. The discharger must file a Report of Waste Discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 17, 1981.

FRED H. DIERKER
Executive Officer

Attachments:
Standard Provisions & Reporting Requirements dated April 1977
Self-Monitoring Program

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Intel Corporation

Santa Clara, Santa Clara County

NPDES NO. CA 0028649

ORDER NO. 81-33

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. Effluent

Station	Description
E-001	At any point in the outfall between the point of discharge and the point at which all waste tributary to that outfall is present.

II. SCHEDULE OF SAMPLING AND ANALYSIS

A. The schedule of sampling and analysis shall be that given as Table I.

B. Reports shall be submitted on April 15, July 15, October 15 and January 15.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 81-33.

2. Does not include the following paragraphs of Part A:

   D.1, D.2.a, D.3, D.4, E.2.b, E.2.c, E.3, E.4, F.2, F.3.b, F.3.c, F.3.d, F.3.e, F.3.f and F.3.g.

3. Is effective on the date shown below.

4. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

FRED H. DIERKER
Executive Officer

Attachment:
Table I (2 pages)

Effective Date 7-6-81

TABLE I

SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001												
TYPE OF SAMPLE	G												
Flow Rate (mgd)	D												
BOD, 5-day, 20° C, or COD (mg/l & kg/day)													
Chlorine Residual (mg/l & kg/day)	D												
Settleable Matter (ml/1-hr. & cu. ft./day)													
Total Dissolved Solids (mg/l & kg/day)	D												
Oil & Grease (mg/l & kg/day)													
Coliform (Total or Fecal) (MPN/100 ml) per req't													
Fish Toxicity, 96-hr. TL_{50} % Survival in undiluted waste	Q												
Ammonia Nitrogen (mg/l & kg/day)													
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)													
pH (units)	D												
Dissolved Oxygen (mg/l and % Saturation)													
Temperature (°C)	D												
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)													
Arsenic (mg/l & kg/day)													
Cadmium (mg/l & kg/day)													
Chromium, Total (mg/l & kg/day)													
Copper (mg/l & kg/day)													
Cyanide (mg/l & kg/day)													
Silver (mg/l & kg/day													
Lead (mg/l & kg/day)													

TABLE I (continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	E-001												
TYPE OF SAMPLE	G	O											
Mercury (mg/l & kg/day)													
Nickel (mg/l & kg/day)													
Zinc (mg/l & kg/day)													
PHENOLIC COMPOUNDS (mg/l & kg/day)													
All Applicable Standard Observations		W											
Bottom Sediment Analyses and Observations													
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)													

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample
C-24 = composite sample - 24-hour
C-X = composite sample - X hours (used when discharge does not continue for 24-hour period)
Cont = continuous sampling
DI = depth-integrated sample
BS = bottom sediment sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
A = treatment facility influent stations
E = waste effluent stations
C = receiving water stations
P = treatment facilities perimeter stations
L = basin and/or pond levee stations
B = bottom sediment stations
G = groundwater stations

FREQUENCY OF SAMPLING

E = each occurence
H = once each hour
D = once each day
W = once each week
M = once each month
Y = once each year

2/H = twice per hour
2/W = 2 days per week
5/W = 5 days per week
2/M = 2 days per month
2/Y = once in March and once in September
Q = quarterly, once in March, June, Sept. and December

2H = every 2 hours
2D = every 2 days
2W = every 2 weeks
3M = every 3 months
Cont = continuous